Headquarters U.S. Air Force

Integrity - Service - Excellence

Distributed Mission Operations

Colonel David Votipka
Commander
Air Force Agency for
Modeling and Simulation

U.S. AIR FORCE

22 July 2003

U.S. AIR FORCE

Modeling & Simulation Strategy

Integrate Live, Virtual, and Constructive Assets

- **Globally Distribute Mission Rehearsal**
- **Enable Better Joint Operations**
- **Conduct Course of Action Analysis**
- **Facilitate Acquisition Decisions**

Joint Synthetic Battlespace

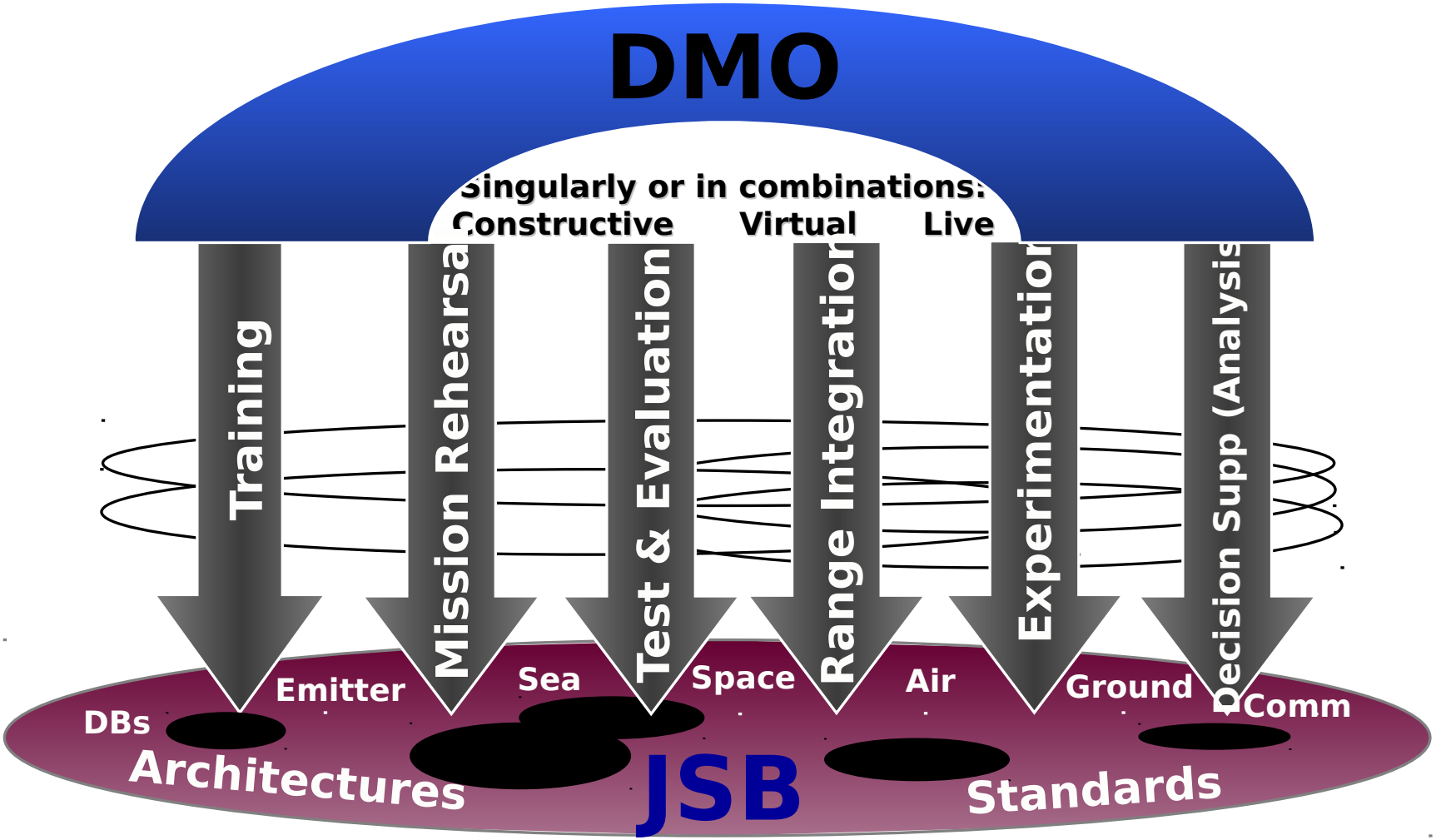
Distributed Mission Operations

Joint Distributed Engineering Plant

Supporting Joint National Training Capability and Distributed Continuous Experimentation Env.

U.S. AIR FORCE

DMO Sight Picture

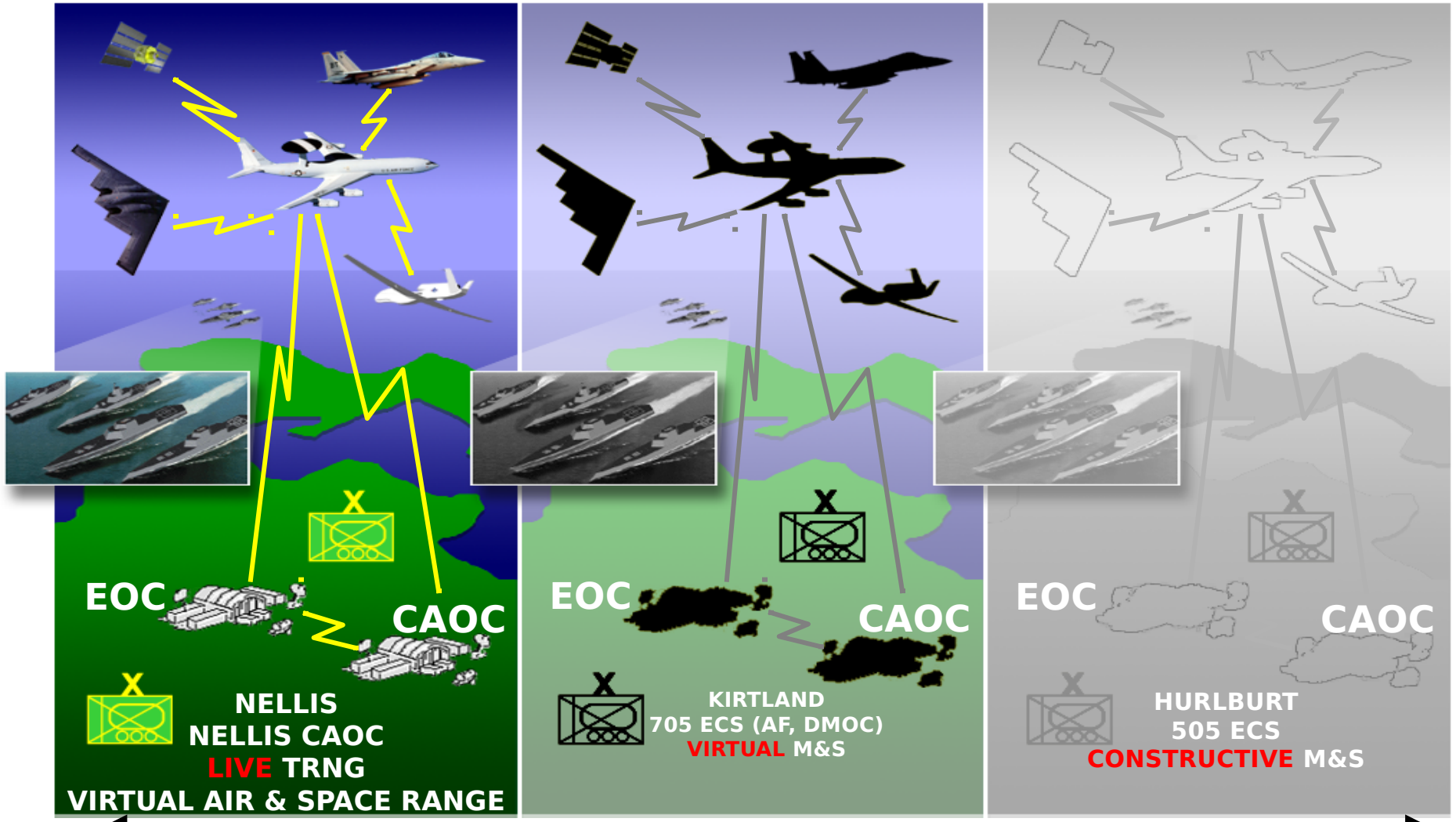


Live, Virtual, Constructive

U.S. AIR FORCE

Wings

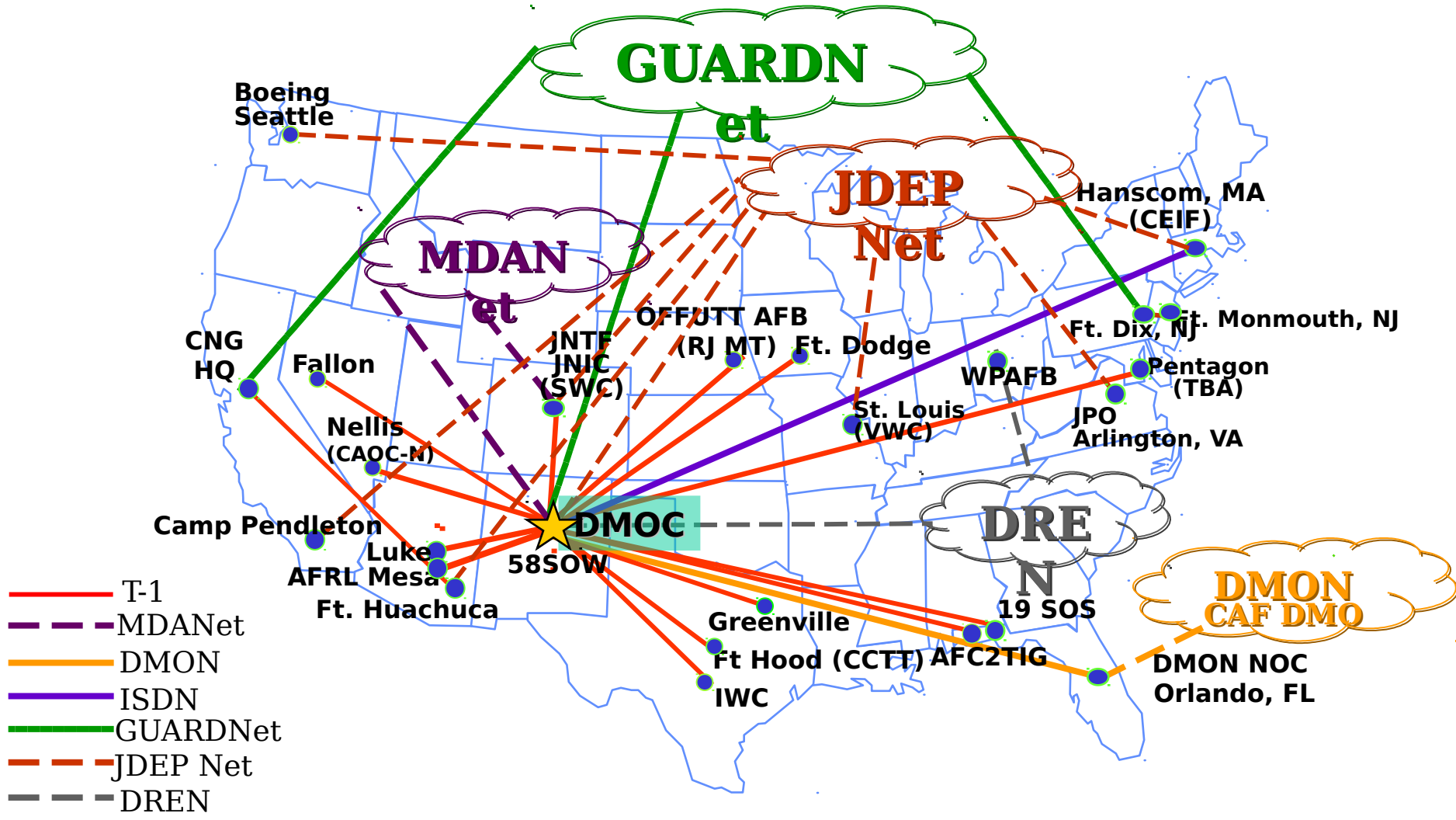
NAFs



TACTICAL TO OPERATIONAL

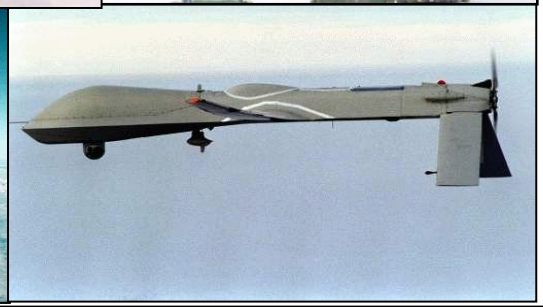
USAF DMOC Connectivity

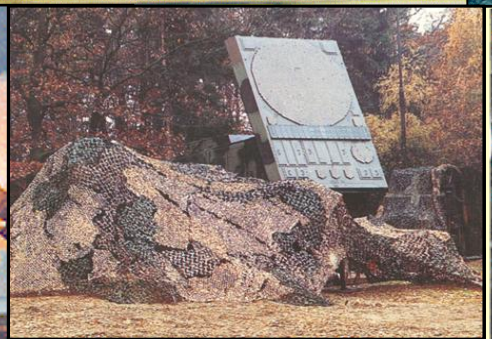
U.S. AIR FORCE



U.S. AIR FORCE

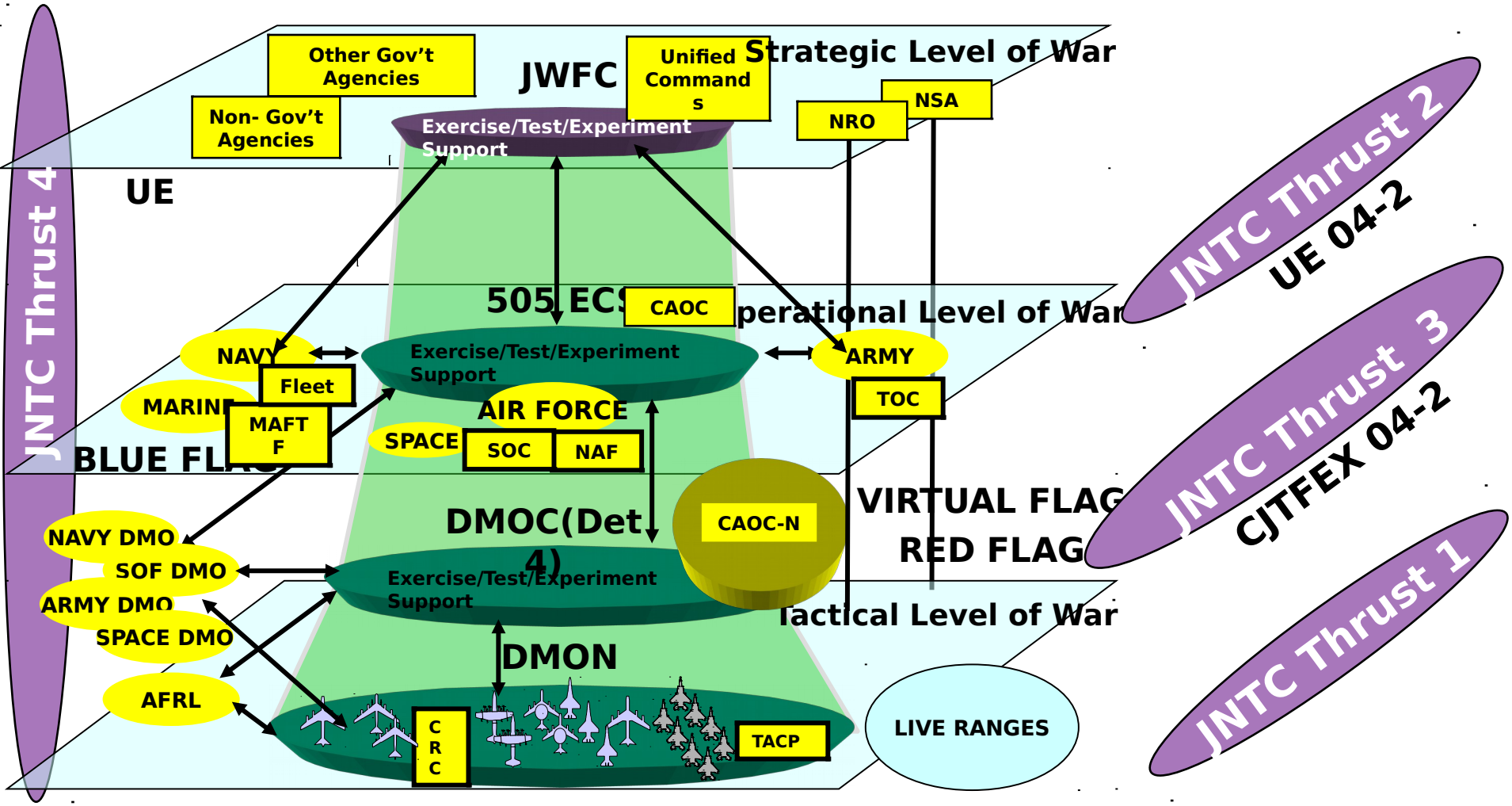
Virtual Flag





U.S. AIR FORCE

DMO & JNTC



AF Chief of Staff Guidance

U.S. AIR FORCE

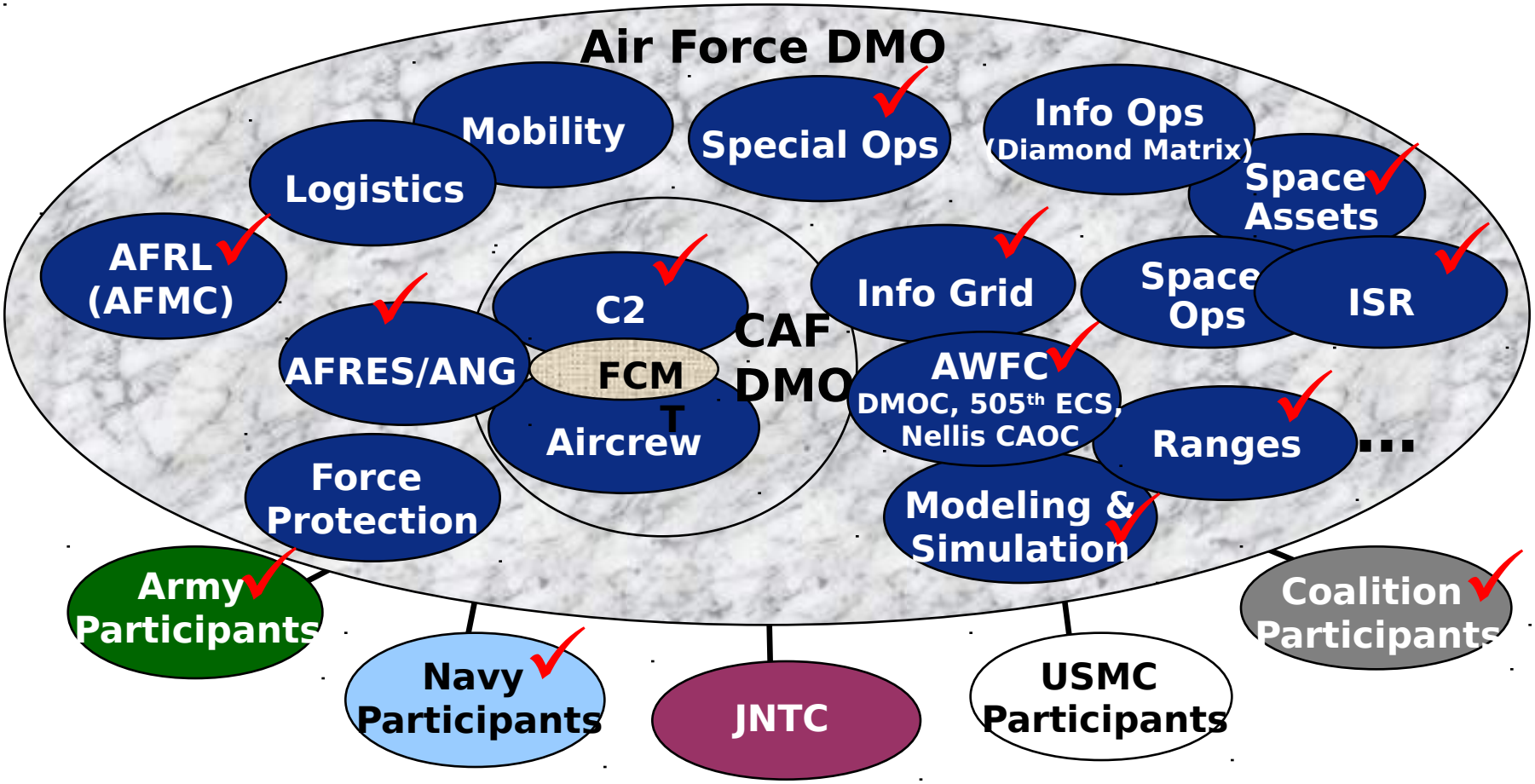
Task: Use Synthetic Environments (Live, Virtual, and Constructive) for Support to Operations

- **Stress the Most Complex Combat Missions**
- **Create a Synthetic Environment for Command and Control, Intel-Surveillance-Recon, Space, Info Ops, and Shooters**
- **Include Precious Assets for Full-Team Practice**
- **Certify Air & Space Operations Center Team and Leadership**
- **Conduct Air & Space Expeditionary Force Mission Rehearsal**
- **Brief Admiral Giambastiani's Staff on Distributed Mission Ops**
- **ID ways to fund DMO w/other than O&M Funds**

DMO Capability Domains

U.S. AIR FORCE

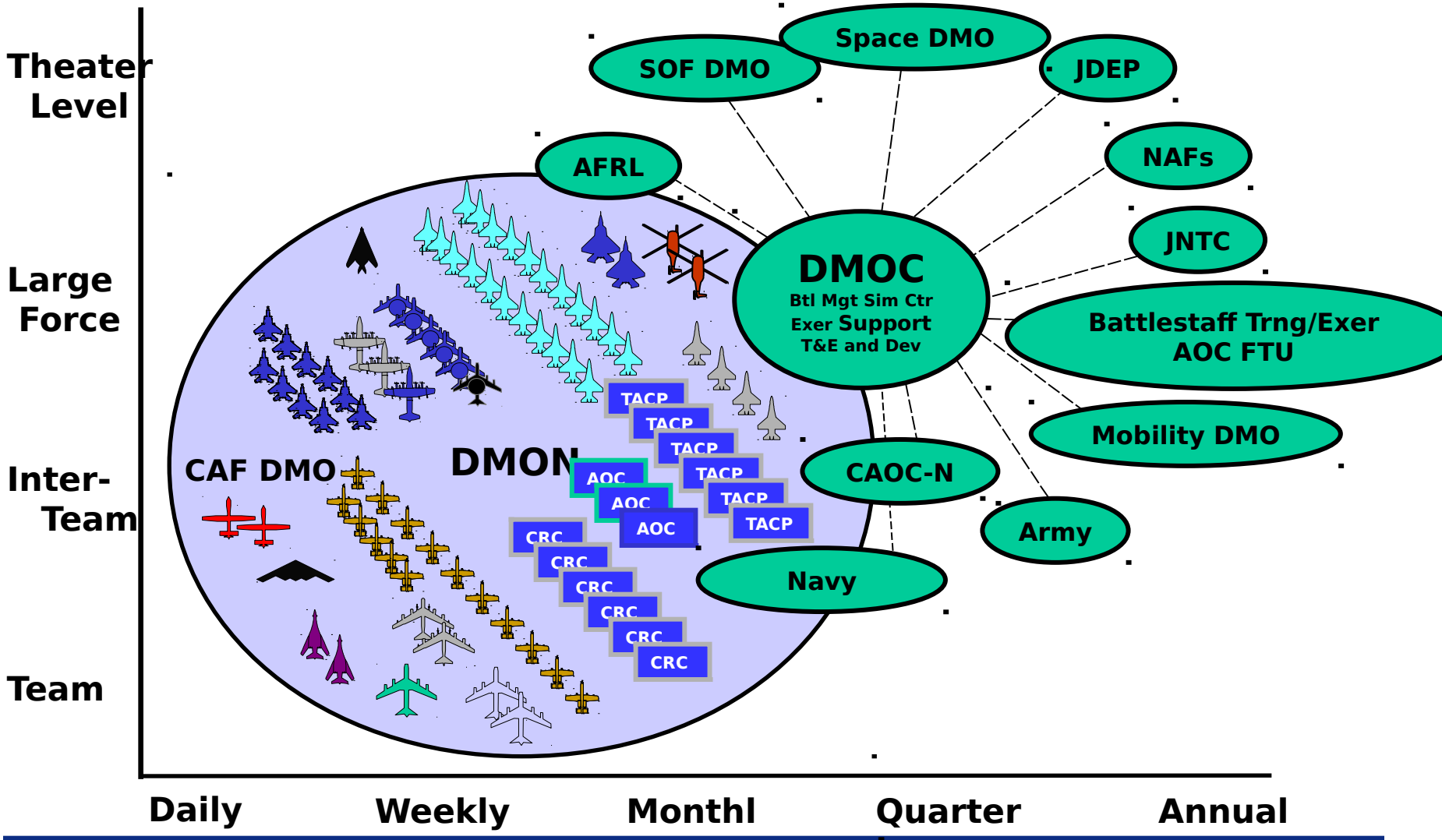
Integration of Domains Regulated by Funding, Technology, and Requirements



✓ - DMO Integration Started in FY03; For Recurring Training, Much Work Remains

Future DMO Architecture

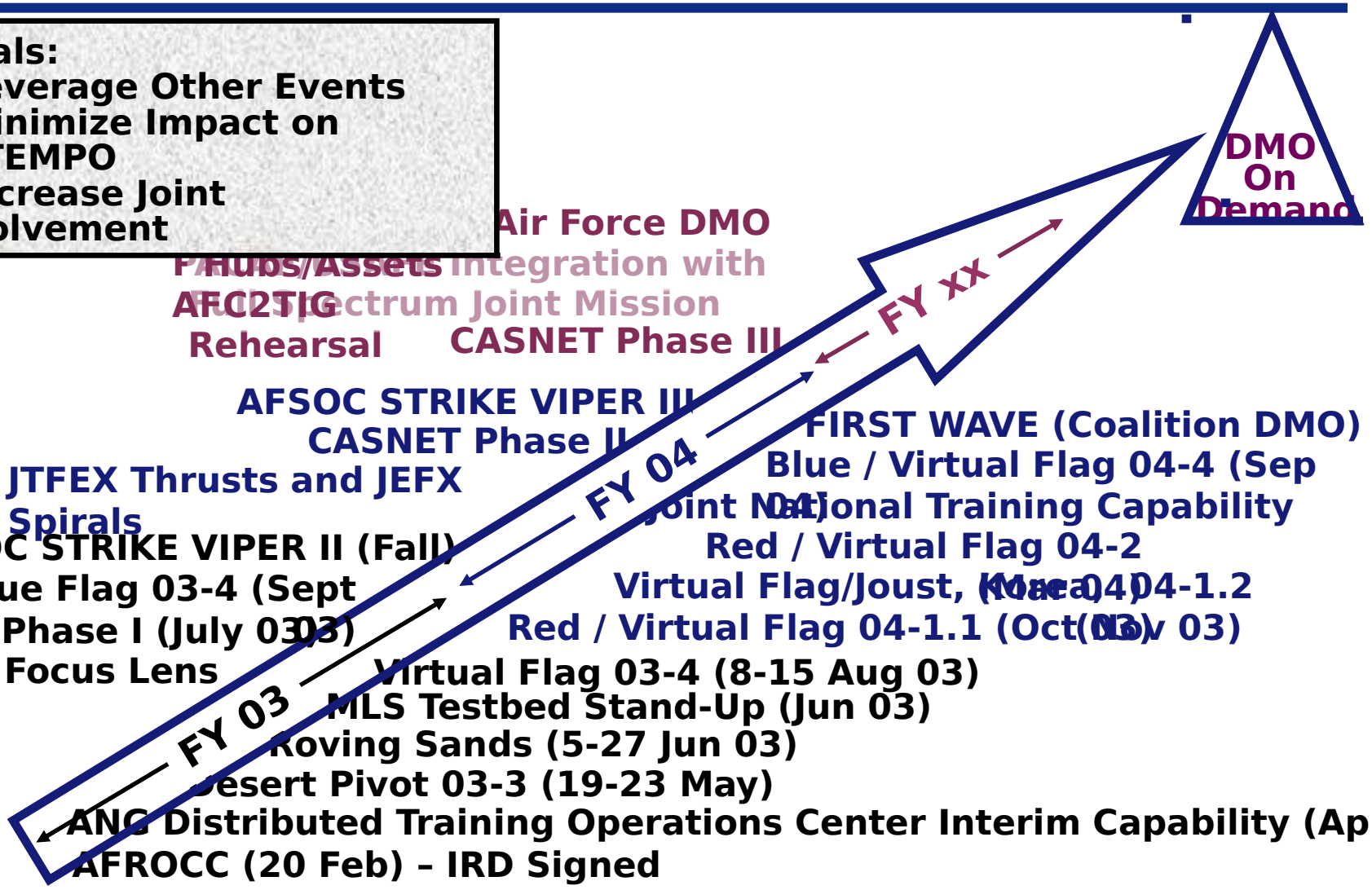
U.S. AIR FORCE



Future DMO Events

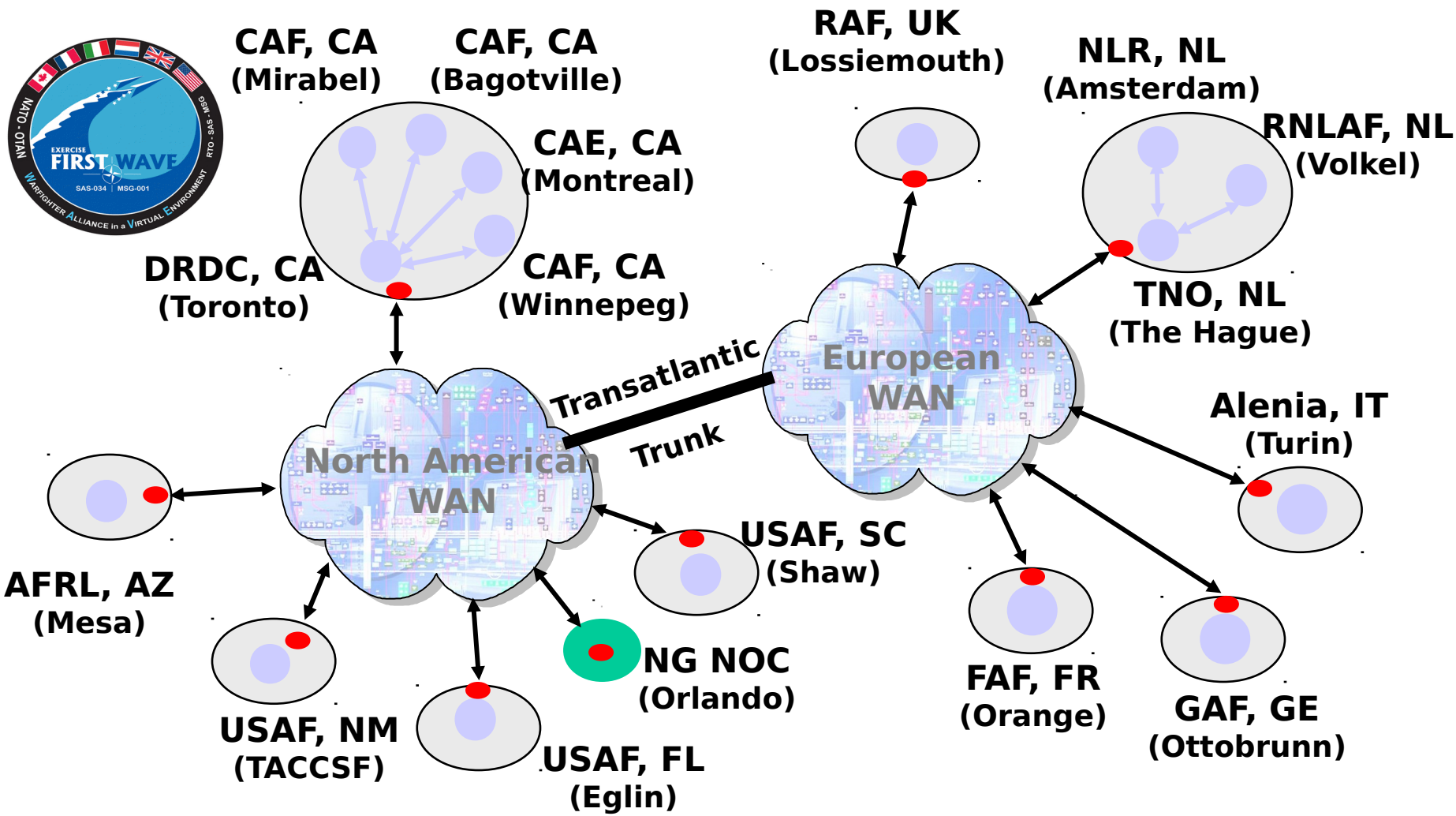
U.S. AIR FORCE

Goals:
- Leverage Other Events
- Minimize Impact on OPTEMPO
- Increase Joint Involvement



U.S. AIR FORCE

NATO First WAVE



Early DMO Progress

- Positive Warfighter Feedback from Each DMO Event
- Developed CRC Working Prototype for DMO Training / Rehearsal
- Funded Collateral Damage Estimation Tools and Improvements
- Integrating in FY03:
  - CSAR and TCT in Each Desert Pivot (Iraqi Freedom Impact)
  - Combat Ops (Nellis CAOC) / ACE to Tactical / Engagement Level
  - Selected ANG A-10s and TACCSF F-15E (Desert Pivot 03-4)
- Expanded Army, Navy, USMC, SOF, Joint, Coalition Interest (FY04)
  - Link USN and USAF Simulator Hubs and M&S Centers
  - Coordinating with JCAS Program, Evaluating Prototype

U.S. AIR FORCE

Next Steps

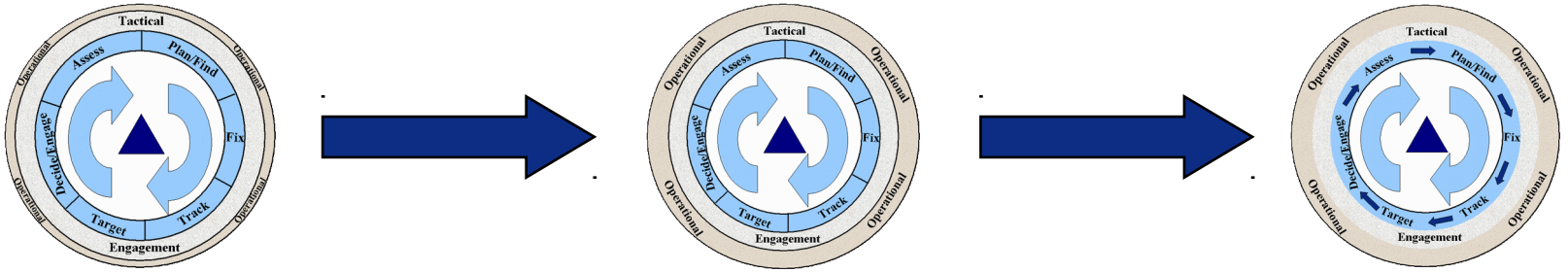
Better define Capability DMO Delivers

Build Roadmaps for Supporting Programs

Promote Distributed Mission Operations to Services and to Joint Forces Command;

Look for Ways to Integrate with Others

Find, Fix, Track, Target, Engage, and Assess:



Block 0 (FY03)
Train, Rehearse, Ops
Explore the Seams

Block 10 (FY05) – 30 (FY09)
Train, Rehearse, Ops
Close the Seams

Block xx (FY10 and beyond)
Train, Rehearse, Ops
Dissolve the Seams

U.S. AIR FORCE

Summary

- DMO is Air Force Training Transformation
- DMO is the Air Force piece of Joint National Training Capability (JNTC)
- DMO links Live, Virtual, Constructive Simulation
- DMO provides Training, Mission Rehearsal, and Decision Support to Operations through shared information

DMO provides Air Force participation into environments for Experimentation, Testing, Training, and Technology in an effort to "Share Emerging Technologies"

U.S. AIR FORCE

Modeling & Simulation Strategy

Integrate Live, Virtual, and Constructive Assets

- **Globally Distribute Mission Rehearsal**
- **Enable Better Joint Operations**
- **Conduct Course of Action Analysis**
- **Facilitate Acquisition Decisions**

Joint Synthetic Battlespace

Distributed Mission Operations

Joint Distributed Engineering Plant

Supporting Joint National Training Capability and Distributed Continuous Experimentation Env.

Headquarters U.S. Air Force

Integrity - Service - Excellence

Distributed Mission Operations

"Training Transformation for the Air Force"

Colonel David Votipka
Commander
Air Force Agency for
Modeling and Simulation

U.S. AIR FORCE

22 July 2003